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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of

ACHIM QUAISER, et al.

Group Art Unit: Unknown

Application No.: 10/525,708

Examiner: Unknown

Filed: February 18, 2005

Confirmation No.: Unknown

For: ISOLATION AND CLONING OF DNA FROM UNCULTIVATED ORGANISMS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

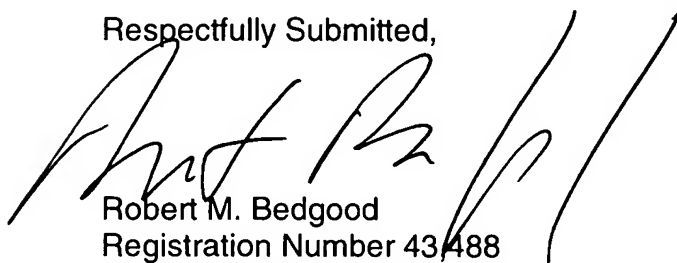
Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Applicants respectfully request the Examiner return an initialed copy of the enclosed Form PTO-1449 to Applicants with the next Office communication to indicate that the reference(s) has been considered, per MPEP § 609.

This Supplemental Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of the first Office Action on the merits in the present application. No certification or fee is required.



English-language Abstracts of the non-English language references are attached hereto.

Respectfully Submitted,

  
Robert M. Bedgood  
Registration Number 43,488  
Customer Number: 27500

Date: July 1, 2005

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**CERTIFICATION UNDER 37 C.F.R. §§ 1.8 and/or 1.10\***

(When using Express Mail, the Express Mail label number is *mandatory*; Express Mail certification is *optional*.)

I hereby certify that, on the date shown below, this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: July 1, 2005

  
Signature

LAURA V. LARGEY

(type or print name of person certifying)

\* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
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Atty.  
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M

Client Ref.

009848

0314964

G1184 US

Applicant: Quaizer et al.

Appln. No.: 10/525,708

Filing Date: February 18, 2005

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Group Art Unit: unknown

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date: July 1, 2005

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## U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR 5,817,225	10/06/1998	Hinton			
	BR 5,849,491	12/15/1998	Radomski et al.			
	CR 6,001,574	12/14/1999	Short et al.			
	DR 6,054,267	04/25/2000	Short			
	ER 6,057,103	05/02/2000	Short			
	FR 6,280,926	08/28/2001	Short			

## FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
	GR 98/58085	12/23/1998	WO	Short et al.				
	HR 99/10539	03/04/1999	WO	Short				
	IR 99/00168	01/07/1999	WO	Coffman				
	JR 99/45154	09/10/1999	WO	Short et al.				
	KR 01/040497 A2	06/07/2001	WO	Jeannin et al.	X			
	LR 01/040497 A3	06/07/2001	WO	Jeannin et al.	X			
	MR 01/081357 A2	11/01/2001	WO	Nalin et al.	X			

## OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

	NR	Database WPI, Section Ch, Week 198934, Derwent Publications Ltd., London, GB; Class B04, AN 1989-246867, XP 002266614				
	OR	Amann, et al., "Phylogenetic Identification and In Situ Detection of Individual Microbial Cells without Cultivation," <u>Microbiological Reviews</u> (1995) 59(1):143-169				
	PR	Béjà, et al., "Construction and analysis of bacterial artificial chromosome libraries from a marine microbial assemblage," <u>Environmental Microbiology</u> (2000) 2(5):516-529				
	QR	Berthelet, et al., "Rapid, direct extraction of DNA from soils for PCR analysis using polyvinylpyrrolidone spin columns," <u>FEMS Microbiology Letters</u> (1996) 138:17-22				
	RR	Brady, et al., "Cloning and Heterologous Expression of a Natural Product Biosynthetic Gene Cluster from eDNA," <u>Organic Letters</u> (2001) 3(13):1981-1984				
	SR	Cottrell, et al., "Chitinases from Uncultured Marine Microorganisms," <u>Applied and Environmental Microbiology</u> (1999) 65(6):2553-2557				

Examiner

Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Applicant: Quaiser et al.

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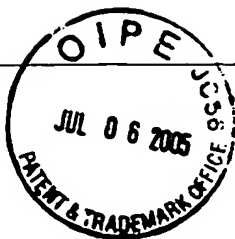
TR	Entcheva, et al., "Direct Cloning from Enrichment Cultures, a Reliable Strategy for Isolation of Complete Operons and Genes from Microbial Consortia," <u>Applied and Environmental Microbiology</u> (2001) 67(1):89-99				
UR	Handelsman, et al., "Molecular biological access to the chemistry of unknown soil microbes: a new frontier for natural products," <u>Crosstalk</u> (1998) 5(10):R245-R249				
VR	Henne, et al., "Construction of Environmental DNA Libraries in <i>Escherichia coli</i> and Screening for the Presence of Genes Conferring Utilization of 4-Hydroxybutyrate," <u>Applied and Environmental Microbiology</u> (1999) 65(9):3901-3907				
WR	Henne, et al., "Screening of Environmental DNA Libraries for the Presence of Genes Conferring Lipolytic Activity on <i>Escherichia coli</i> ," <u>Applied and Environmental Microbiology</u> (2000) 66(7):3113-3116				
XR	Holben, et al., "DNA Probe Method for the Detection of Specific Microorganisms in the Soil Bacterial Community," <u>Applied and Environmental Microbiology</u> (1998) 54(3):703-711				
YR	Jackson, et al., "A Simple, Efficient Method for the Separation of Humic Substances and DNA from Environmental Samples," <u>Applied and Environmental Microbiology</u> (1997) 63(12):4993-4995				
ZR	LeBreton, et al., "Demonstration of extraction and PCR amplification of DNA from phytoplankton of lakes with high humic acid content," <u>Hydrobiologia</u> (2000) 438:91-97				
AAR	MacNeil, et al., "Expression and Isolation of Antimicrobial Small Molecules from Soil DNA Libraries," <u>J. Med. Microbiol. Biotechnol.</u> (2001) 3(2):301-308				
BBR	Miller, "Evaluation of gel filtration resins for the removal of PCR-inhibitory substances from soils and sediments," <u>Journal of Microbiological Methods</u> (2001) 44:49-58				
CCR	Quaiser, et al., "First insight into the genome of an uncultivated crenarchaeote from soil," <u>Environmental Microbiology</u> (2002) 4(10):603-611				
DDR	Rondon, et al., "Cloning the Soil Metagenome: a Strategy for Accessing the Genetic and Functional Diversity of Uncultured Microorganisms," <u>Applied and Environmental Microbiology</u> (2000) 66(6):2541-2547				
EER	Schmidt, et al., "Analysis of a Marine Picoplankton Community by 16S rRNA Gene Cloning and Sequencing," <u>Journal of Bacteriology</u> (1991) 173(14):4371-4378				
FFR	Schwecke, et al., "The biosynthetic gene cluster for the polyketide immunosuppressant rapamycin," <u>Proc. Natl. Acad. Sci. USA</u> (1995) 92:7839-7843				
GGR	Smalla, et al., "Rapid DNA extraction protocol from soil for polymerase chain reaction-mediated amplification," <u>Journal of Applied Bacteriology</u> (1993) 74:78-85				

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OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

HHR	Somerville, et al., "Simple, Rapid Method for Direct Isolation of Nucleic Acids from Aquatic Environments," <u>Applied and Environmental Microbiology</u> (1989) 55(3):548-554				
IIR	Straub, et al., "Removal of PCR Inhibiting Substances in Sewage Sludge Amended Soil," <u>Wat. Sci. Tech.</u> (1995) 31(5-6):311-315				
JJR	Tebbe, et al., "Interference of Humic Acids and DNA Extracted Directly from Soil in Detection and Transformation of Recombinant DNA from Bacteria and a Yeast," <u>Applied and Environmental Microbiology</u> (1993) 59(8):2657-2665				
KKR	Torsvik, "Isolation of Bacterial DNA from Soil," <u>Soil Biol. Biochem.</u> (1980) 12:15-21				
LLR	Torsvik, et al., "Determination of Bacterial DNA in Soil," <u>Soil Biol. Biochem.</u> (1978) 10:7-12				
MMF	Tsai, et al., "Rapid Method for Separation of Bacterial DNA from Humic Substances in Sediments for Polymerase Chain Reaction," <u>Applied and Environmental Microbiology</u> (1992) 58(7):2292-2295				
NNR	Tsai, et al., "Extraction of Nucleic Acids from Environmental Samples," in <u>Environmental Molecular Microbiology: Protocols and Applications</u> , Horizon Scientific Press, Wymondham, U.K., pp. 15-30 (2001)				
OOR	Wang, et al., "Novel Natural Products from Soil DNA Libraries in a Streptomyces Host," <u>Organic Letters</u> (2000) 2(16):2401-2404				
PPR	Young, et al., "Polyvinylpyrrolidone-Agarose Gel Electrophoresis Purification of Polymerase Chain Reaction-Amplifiable DNA from Soils," <u>Applied and Environmental Microbiology</u> (1993) 59(6):1972-1974				
QQR	Zhou, et al., "DNA Recovery from Soils of Diverse Composition," <u>Applied and Environmental Microbiology</u> (1996) 62(2):316-322				

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